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ABSTRACT

The amount of misreporting of Veterans Administration (VA) benefits was assessed, along with the impact of misreporting on the Basic Educational Opportunity Grant (BEOG) program. Accurate financial information is need to determine appropriate awards. The analysis revealed: over 97% of VA beneficiaries misreported benefits; the total net loss to the BEOG program due to misreporting of VA benefits was less than $2 million in 1979-1980; the overreporting of VA benefits was the most common problem; no systematic variation in the likelihood of misreporting of VA benefits was found for the different times of year the BEOG application is filed or when comparing the dependent/independent status of applicants; the majority of misreporting applicants actually overreported the level of benefits they received from the VA program, which caused applicants to qualify for lower levels of BEOG benefits; validation affected misreporting of VA benefits by shifting the type of error from overreporting to underreporting and increasing the loss to the BEOG program due to overpayments to more students; current computer system edits applicable to the VA benefits issue appeared to cause at least a proportion of applicants to shift to overreporting from underreporting VA benefits; and the monthly benefit amount changed at least once annually for 80% of VA recipients. Ten data tables are provided. (SW)

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Prepared for:

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Statistical Match of the VA 1979-80 Recipient File Against the 1979-80 Basic Grant Recipient File

November 14, 1980

Revised

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Background

The Basic Educational Opportunity Grant (BEOG) is the largest of the student financial aid programs administered by the Office of Student Financial Assistance (OSFA). Students who receive a BEOG are also eligible for other types of State and Federal financial aid; thus, the BEOG serves as a cornerstone of aid to students who are eligible based on a formula which determines financial need. The result of this formula calculation is a student eligibility index (SEI) which, together with the cost of education at the institution the student plans to attend and the student's enrollment status (full-time or part-time), determines the amount of BEOG assistance to which the student is entitled.

One of the major management goals of OSFA is to ensure that the Basic Grant Program operates in an efficient manner, and that limited resources are allocated to those students who are most entitled to aid. From this point of view, the management objective is to reduce the amount of student misreporting on BEOG applications, in order to increase the rate of awards based on accurate information.

One of the indicators of financial strength used in BEOG eligibility determinations is the amount of educational assistance received from the Veteran's Administration. This amount is referred to as Veteran's Educational Benefits or VA benefits, and consists of benefits received from the GI Bill and the Veterans or Dependents Educational Assistance Programs. This is not to be confused with the Veteran's Administration's

Death Pension or Dependency and Indemnity Compensation programs. Noneducational funds received from these programs are treated separately as an element of nontaxable income in BEOG eligibility determinations.

Veteran's Educational Benefits or VA Benefits are reported to BEOG as the amount (expected to be) received by the applicant between July 1 and June 30. Since many students complete their BEOG application before they begin receiving VA benefits (BEOG applications are accepted in January for the upcoming academic year which begins in September), they may have to estimate or project the amount expected to be received.

Given these circumstances, the accuracy of the VA benefits is a concern to the managers of the BEOG Program. In order to facilitate accuracy of VA benefits, BEOG management has included a check against VA recipient tapes as a part of application processing. Using social security number and first two letters of the last name as the match indicator, the accuracy of VA benefits data reported to BEOG are assessed and the applicant is advised of the results and to submit a correction to BEOG, if appropriate. Depending on the magnitude of the discrepancy and the student's reaction to the message from BEOG, the student may be selected for validation. Under this procedure the student is required to submit documents supporting a subset of the BEOG application items, including VA benefits.

In order to evaluate the impact of the current procedure, the Office of Student Financial Assistance has sponsored the study presented in this document. The purpose of the study is to explain the viability of using VA and BEOG data that covers the entire school year, instead of the working files, which are incomplete, used during processing. The purpose of this report is to determine the amount of misreporting of VA benefits, the dollar amount of loss to the Basic Educational Opportunity Grant Program as a result of the misreporting, and the impact on the Basic Educational Opportunity Grant Program due to misreporting of VA benefits.

Study Issues

For the investigation of the error rate in BEOG applications which are attributable to misreporting of VA benefits, the following issues have been requested for study by the management of OSFA; these are:

- What is the match rate between BEOG and VA files, and what is the impact of it?
- What are the discrepancy ranges associated with VA misreporting?
- Does the time of year the application is filed relate to error?
- Of first, second, and third year BEOG applicants, which group is more likely to report VA benefits accurately? Or is there no difference?
- Who is more likely to misreport--dependent or independent students?
- Is there any significant pattern in the correction behavior of applicants who are selected for validation when compared with nonvalidated applicants?
- Do the VA edits need revisions?
- What is the relationship between misreporting of VA benefits and the presence of (1) VA benefit changes, (2) accounts receivable to VA, or (3) summer school attendance?

Each of these issues relates to one or another aspect of the BEOG program and its ability to perform efficiently in allocating the available resources. Each issue will be discussed in the remainder of this section.

Issue 1--What is the match rate between BEOG and VA files, and what is the impact of it? The impact of match error on the BEOG program involves examination of the extensiveness of the error due to misreporting of VA benefits by BEOG applicants. The severity of the impact is related to: (1) the proportion of the BEOG applicants who fail to report their VA benefits to BEOG; and (2) the prevalence of reporting error among the subpopulations of BEOG applicants who do report VA benefits. The impact on the program will be greater as the proportion and prevalence are higher, since more people can be affected by error.

Issue 2--What are the discrepancy ranges? Two types of errors in reporting can be made by applicants (i.e., the applicant may report

she/he is receiving more VA benefits than is the case, or the applicant may report receiving less VA benefits than she/he receives). In evaluating the impact of reporting error on the BEOG program, two approaches are taken. First, the total net impact on the program is calculated. This calculation subtracts the total of under-awards from the total of over-awards, to determine the total impact to the program due to misreporting. However, it is of substantial interest also to examine the distribution of the types and magnitudes of the errors in order to estimate the number of persons who received less/more BEOG benefits, as well as the size of the discrepancy in BEOG awards attributable to the misreporting of VA benefits.

The evidence derived from examination of the distribution of discrepancies will provide valuable information for use in the development of policy recommendations.

Issue 3--Does the time of year the application is filed relate to error? Although the majority of students file BEOG applications during the spring and summer of each year, BEOG applications can be filed at any time of year. The amount awarded to the student is based on the information that the student has submitted to the BEOG program at the time the application was filed. Ordinarily, the amount awarded is fixed for the academic year. On the other hand, VA benefits awarded depend on the personal situation that students may have during the year and may vary from month to month. Due to the nature of the VA benefits program and BEOG reporting requirements, the likelihood that students will misreport their level of VA benefits is high. In addition, even those students who report VA benefits accurately may experience a subsequent change in the amount of VA benefits they receive after the BEOG application is filed.

The investigation of this issue was designed to determine any systematic misreporting by the time of year the application is filed and, if there is misreporting, to determine the nature of the relationship between misreporting and the time of year the application was filed.

In addition, this aspect of the study will focus on whether the type of misreporting error varies with the time of the year that the BEOG application is filed. The findings of this issue will be one of the bases for development of recommendations and conclusions on the impact of this type of reporting error on the Basic Grant Program.

Issue 4--Of first, second, and third year BEOG applicants, which group is most likely to misreport benefits? Is there any difference? Generally, it is expected that first-year BEOG filers will be the most likely group to misreport their VA benefits due to their lack of experience with both programs. Investigation of this issue is designed to detect the relationship, if any, of first-year BEOG filing with the likelihood of misreporting of VA benefits. The results of this investigation are also compared with the second and third year BEOG filers' error rate. The results of investigation of this issue will determine the extent of the misreporting and the variations among first, second or third year BEOG filers, by type of error.

The findings of this issue will provide another basis from which recommendations and evaluation of the impact of VA benefits reporting error on the Basic Educational Opportunity Grant Program can be derived.

Issue 5--Who is more likely to misreport--dependent or independent students? It is expected that there may be some degree of systematic reporting error associated with filing status of the student. The dependent student is one who is receiving parental support of a substantial amount. In most cases, these students will be younger and less likely to be married than are independent students. It seems likely that the dependent student will less frequently be found to misreport VA benefits for two reasons: (1) she/he may receive assistance from parents in filling out the BEOG application; and (2) the dependent student is not as likely to have variations in VA benefits as are independent students with a spouse and/or dependent children. It may also be found that the nature of the reporting error may vary by status of the student;

therefore, with dependent students making reporting error due to unfamiliarity with programs, and independent student errors being due to VA benefit changes which occur subsequent to the time of BEOG application.

Identification of the likelihood of error and nature of error variations by student status, will permit development of recommendations with respect to future policy.

Issue 6--Is there any significant pattern in the correction behavior of applicants in the presence of validation or nonvalidation? Approximately 10 percent of all applicants are selected for validation each year. These students are required to document their financial status to officials at the school they select to attend. Previous investigations have shown that post-filing BEOG application changes are more frequent and of greater magnitude among those students selected for validation.

Examination of the accuracy of VA benefits reporting, by validation status of the student, is expected to result in a finding that validated students are less likely to misreport VA benefits than are nonvalidated students. If this is not the finding, then it may be the case that VA benefits are difficult to report accurately in advance.

In either case, the result of this investigation will provide useful input into the process of developing recommendations for this issue.

Issue 7--Do the VA edits need revisions? The Basic Grant application processing system includes several features that were designed to minimize the number of student eligibility determinations made on the basis of invalid, inaccurate, or incomplete data. One of these features is a series of edits for missing information and for the logic and consistency of all application data. If a problem is detected through the edit process, the applicant may be required to provide missing information or to clarify inconsistencies prior to the determination of her/his eligibility for the program.

Current edits which address VA benefits occur after a match with VA working files which indicates whether the BEOG applicant may be eligible

to receive VA benefits. Other edits address the consistency of the amount reported with other BEOG data, as well as the amount falling into a maximum allowable range. The information gained during the current study will permit the development of specific recommendations with respect to the desirability of revising the current edits specifically to address the VA benefits error problem.

Issue 8--What is the relationship between misreporting of VA benefits and the presence of (1) VA benefit changes, (2) accounts receivable to VA, or (3) summer school attendance? There are three possible alternative explanations from VA of why BEOG applicants may misreport data. First, misreporting may occur because the applicant's VA benefits actually changed subsequent to the time she/he filed the BEOG application. A change in courseload, the number of semesters, trimesters, etc. attended, and changes in the applicant's marital status cause the amount of VA benefits to change.

Second, VA benefit recipients in some cases have been given VA benefits greater than those that for which they are eligible. When these excess payments are discovered, the VA recipient is required to repay to the VA program the excess payments received. It is possible that applicants who have reported the amount correctly to BEOG may have been awarded excess VA benefits and are required to repay these amounts to VA. This would appear as though these VA beneficiaries are overreporting to BEOG.

A third possibility is that VA benefits to students who attend summer school will be higher than the student anticipated and reported based upon the presumption of only nine months in college each year. Therefore, we will examine the relationship between misreporting, type of error, and summer school attendance.

If any of these alternatives exhibit a systematic relationship with VA reporting errors, then they may be a factor to consider in determining how the BEOG Program should measure VA benefits in its eligibility determination process.

Study Data

Two data sets were used for the analysis performed for this study. The Basic Grant applicant data base consisting of individual records of applicants for the 1979-80 academic year was matched with the VA file tape containing records for all beneficiaries in 1979-80, in order to identify those students that are receiving benefits from both programs during 1979-80. Matching is based on the student social security number and the first two letters of their surnames, or on their social security number and the month and the year of birth, as appropriate. More detailed information on the data sets and study procedures may be found in Appendix A.

The results of this matching will be utilized for the analyses conducted for this study and reported below.

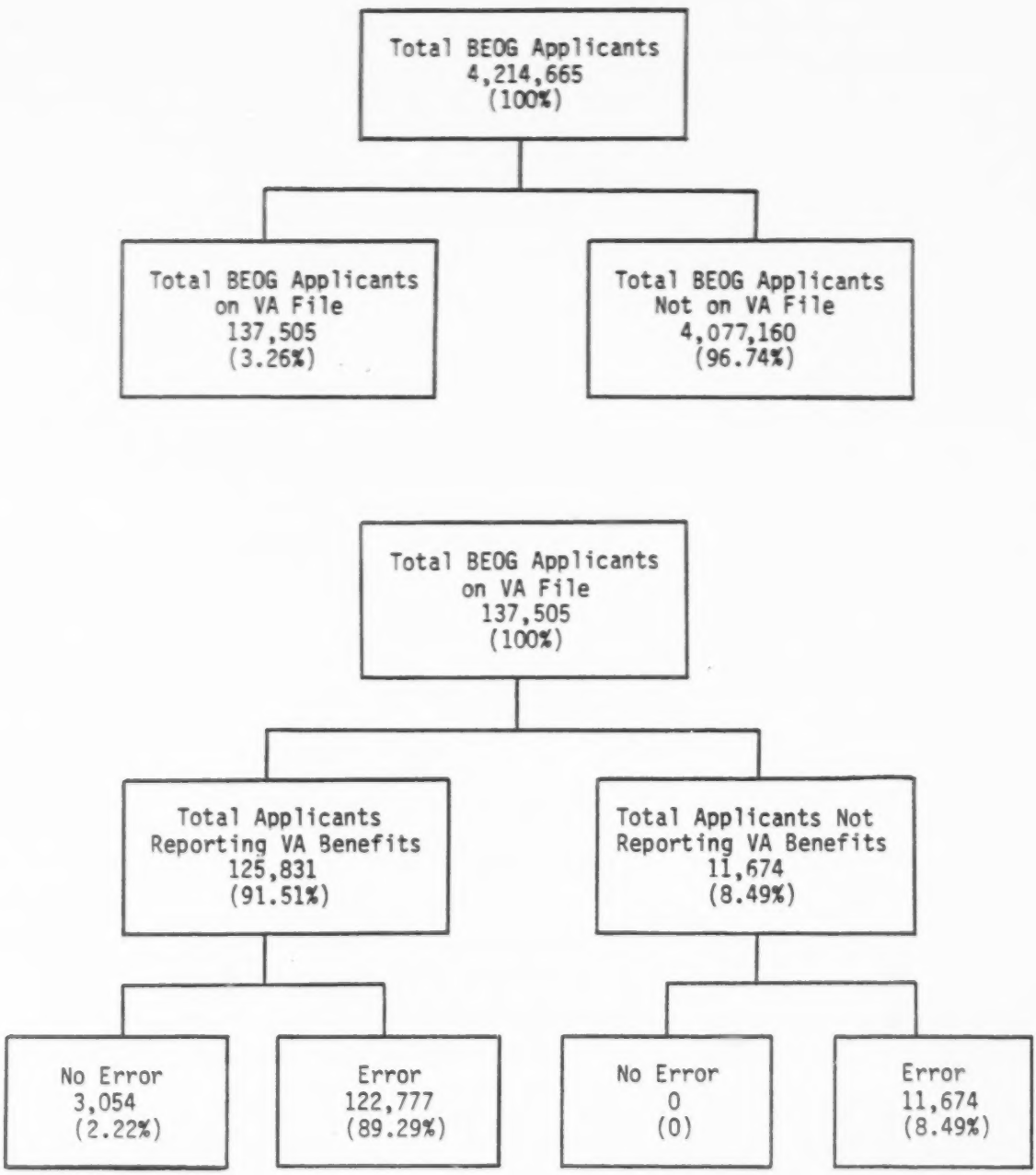
Findings

Issue 1--What is the match rate between BEOG and VA files, and what is the impact of it? The impact of match error on the BEOG program will vary as the proportion of BEOG applicants with VA benefit eligibility varies and as the error rate for this subgroup varies. Figure 1 presents a summary of the findings of this aspect of this investigation.

Of 4,214,665 BEOG applicants from January 1979 to June 1980, only 137,505 (3.26%) were also present on the VA file. Over 96 percent of all BEOG applicants had no matching record on the VA file.

Examination of the subset of BEOG applicants also present on the VA file was then conducted. Of the 91.51 percent (125,831 applicants) reported that they were receiving VA benefits. Of these matched students reporting VA benefits, 122,777 (89.29%) were found to have discrepancies between the level of VA benefits reported to BEOGs and the level reported on the VA file, while only 2.22 percent of matched students reported the same (up to one dollar) amount of VA benefits to BEOG as they did to VA.

FIGURE 1: SUMMARY OF MISREPORTING OF VA BENEFITS ON BEOG APPLICATIONS



Only 8.49 percent (11,674 applicants) were matched but did not report VA benefits on the BEOG application. Of these "not reporting" applicants, all 11,674 obviously were found to exhibit discrepancies between the VA benefits received and those reported.

Clearly, the impact of match error on the BEOG program is relatively small, only 3.26 percent of students are involved in the VA program. However, the evidence presented here indicated that the vast majority of this subgroup is in error. The remainder of this document discusses errors associated with the matched group.

Issue 2--What are the discrepancy ranges associated with VA misreporting? The impact of misreporting of VA benefits may be measured in two ways. The net impact on the program is defined as:

(Underpayments to students) Minus
(Overpayments to students) = Net Impact

An alternative measure of impact is calculation of the total amount of BEOG funds misallocated (i.e. overpayments plus underpayments) due to misreporting of VA benefits.

Results of this examination of impact on the BEOG program of misreporting of VA benefits are shown in Table 1. The net impact on the program is -$1,283,100 for academic year 1979-80 for all applicants combined. This finding can be interpreted as indicating that, had accurate reporting of all VA benefits occurred, the BEOG program would have paid out to students an additional $1,283,100.

The total misallocation of BEOG funds due to VA misreporting was $5,591,100--$2,154,000 in overpayments plus $3,437,100 in underpayments to students.

Examination of total misallocation by validation status of recipients reveals different patterns than are evident in the population as a whole. While underpayments to recipients dominates for the total recipient group and for the nonvalidated group, students selected for validation are less likely to overreport VA benefits and thus are less frequently underpaid BEOG benefits.

TABLE 1: IMPACT ON BEOG PROGRAM AS A RESULT OF MISREPORTING OF VA BENEFITS FOR BEOG APPLICANTS WHO HAD A VA RECORD

Validation Status	Net Impact on Program Due to Misreporting of VA Benefits	Total Funds Misallocated
Applicants Selected for Validation	$ 76,812	$ 415,812
Applicants Not Validated	-$1,359,912	$5,175,288
Total Applicants	-$1,283,100	$5,591,100
	Overpayments to Students Underreporting VA Benefits[1/]	Underpayments to Students Overreporting VA Benefits
Applicants Selected for Validation	$ 246,312	$ 169,500
Applicants Not Validated	$1,907,688	$3,267,600
Total Applicants	$2,154,000	$3,437,100

1/The total amount of underreporting attributed to applicants who fail to report any VA benefits to BEOG is $788,572 or 36.6 percent of the total dollars overpaid.

Another alternative measure of the severity of the problem of misreporting of VA benefits is the distribution of the differences between actual VA benefits and reported VA benefits on the BEOG application. The distribution of the discrepancy ranges between the reported and actual VA benefits is of interest because it provides an indication of the impact of misreporting on the student eligibility index (SEI) and on the level of BEOG benefits which will be awarded.

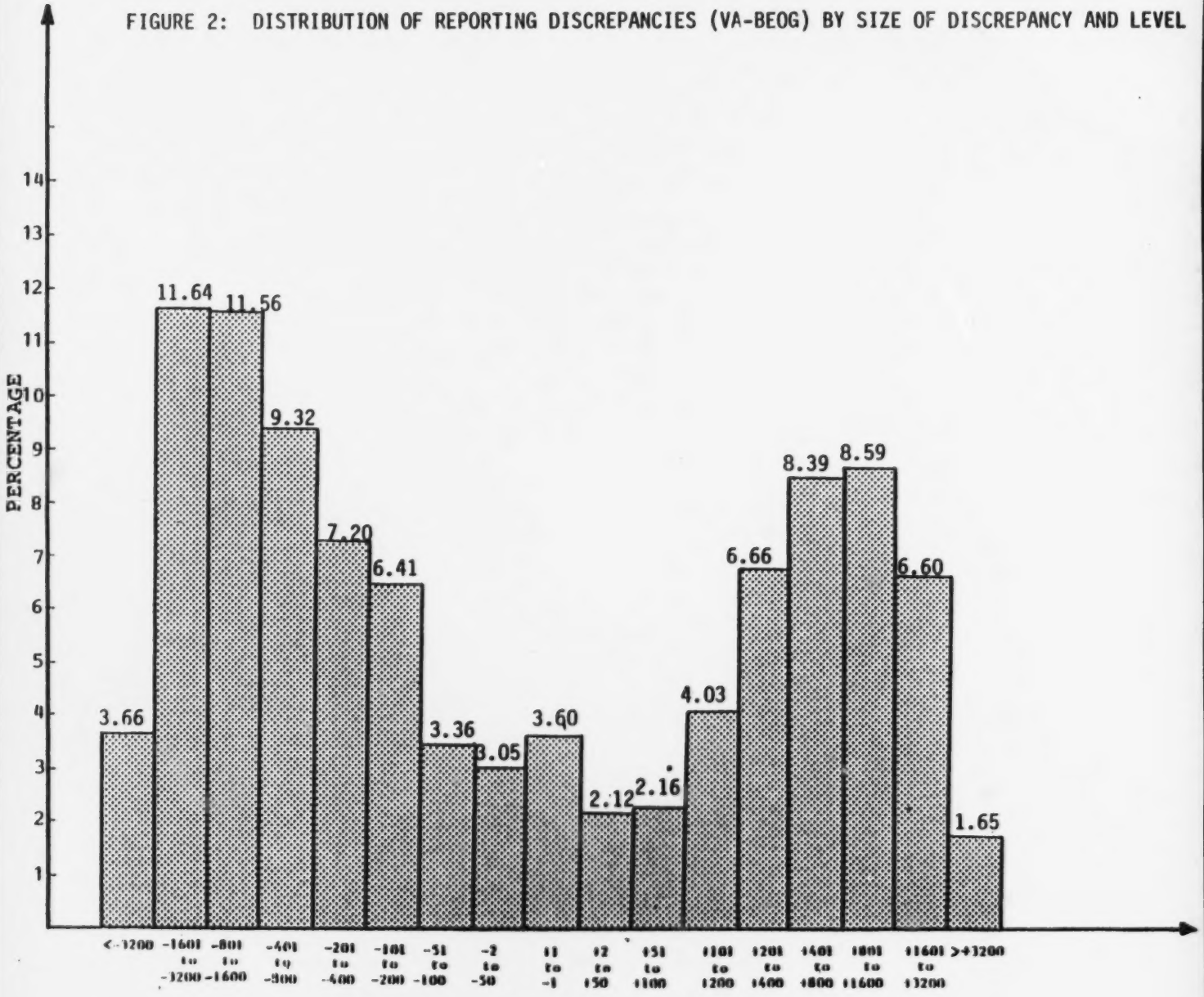
The distribution of discrepancies in Table 1 indicates a very different trend than has been found for other BEOG application items. Generally, the distributions tend to cluster around accurate reporting, with the majority of discrepancies being close to accurate reporting. Here the distribution is bimodal with the largest percentages of misreporting at the extremes. Thus, it appears that VA benefits is a highly suspect item.

The percentage of applicants misreporting VA benefits by the calculated discrepancy range category (i.e., VA actual benefits minus VA benefits reported on the BEOG application) is illustrated in Figure 2. Almost 27 percent of applicants exhibit discrepancies due to overreporting of VA benefits that are larger than $800. Another 16 percent overreport $200-$800 in VA benefits; while an additional 13 percent overreport $2-$200. Thus, a total of 56 percent of all applicants overreport VA benefits and, consequently, may have lower than appropriate BEOG awards.

On the other hand, examination of Figure 2 shows that 17 percent underreport VA benefits by more than $800; 15 percent underreport by $200-$800; while 8 percent underreport $2-$200 in VA benefits. These underreporting applicants presumably received higher levels of BEOG benefits than would be appropriate based upon their actual VA benefits level.

The dollar value of the discrepancies found in this match between actual VA benefits and BEOG reported VA benefits is important only to the extent that it results in a miscalculation of the Student Eligibility

FIGURE 2: DISTRIBUTION OF REPORTING DISCREPANCIES (VA-BEOG) BY SIZE OF DISCREPANCY AND LEVEL



Index (SEI) and, consequently, inappropriate payments to students under the BEOG program. Table 2 relates the discrepancy ranges, depicted in Figure 2, to the level of SEI discrepancies resulting from misreporting VA benefits and to the levels of over- and underpayments of BEOG funds resulting from this misreporting.

TABLE 2: IMPACT OF MISREPORTING OF VA BENEFITS ON SEI AND ON BEOG PAYMENT LEVELS, BY MAGNITUDE OF DISCREPANCY RANGES

(1) Size of Discrepancy (VA-BEOG)	(2) Average SEI Change	(3) Number With Change	(4) Average Payments Change	(3) Number With Change
Less than -3200	-518	2,336	487	1,547
-1601 to -3200	-351	6,379	363	3,984
-801 to -1600	-193	5,887	206	3,524
-401 to -800	-101	4,525	123	2,376
-201 to -400	-50	3,476	76	1,571
-101 to -200	-26	3,191	56	983
-51 to -100	-14	1,626	58	276
-2 to -50	-5	1,378	52	104
+1 to -1	-1	152	0	0
+2 to +50	+6	929	-47	60
+51 to +100	+13	978	-55	158
+101 to +200	+26	1,948	-60	612
+201 to +400	+54	3,332	-81	1,549
+401 to +800	+105	4,185	-134	2,198
+801 to +1600	+196	4,380	-215	2,681
+1601 to +3200	+298	3,929	-319	2,448
Greater than +3200	+476	1,047	-453	671

In Table 2, Column (1) lists the size of the discrepancy between the VA benefits received and the VA benefits reported on the BEOG application. Column (2) reports the average change in the SEI that would result if the actual level of VA benefits had been reported on the BEOG application, with the number of BEOG applicants in Column (3). Column (4) of Table 2 reports the average change in the BEOG payment which is associated with each specific discrepancy range level and associated

average SEI change. Column (5) contains the number with a payment change. As is shown, the average payment change ranges from $487 for the maximum overreporting of VA benefits discrepancy to -$453 for applicants underreporting over $3200 in VA benefits. These over- and underpayments of BEOG benefits result, when summed, in the net underpayment of over $1,000,000 in BEOG benefits to applicants during the January 1979 to June 1980 time. Also, the number of applicants with eligibility index changes is less than the number with discrepancies in reported VA amounts. Similarly, the numbers with award changes are lower than the numbers with payment changes. However, the larger the size of the change, the greater the number of applicants affected.

In sum, examination of discrepancy ranges between actual and reported VA benefits indicates that, overall, these discrepancies more frequently and more severely impact on the SEI in a negative manner. A larger amount of BEOG funds are withheld from applicants due to misreporting than are overpaid to applicants underreporting VA benefits.

Issue 3--Does the time of year the application is filed relate to any error? Investigation was conducted of the question of whether there was any systematic variation in the rate of reporting errors in VA benefits by the time of year in which the application is filed. Applications in each quarter from January/March 1979 to April/June 1980 were examined and compared with the VA records for that quarter in order to determine the number and frequency of:

- applicants receiving VA benefits in that quarter;
- applicants misreporting VA benefits in that quarter;
- applicants underreporting VA benefits in the quarter; and
- applicants overreporting VA benefits in the quarter.

Results of this investigation are presented in Table 3.

The proportion of all BEOG applicants who receive VA benefits has increased from 0.72 percent in the January/March 1979 quarter to 6.31 percent in the April/June 1980 quarter. In all quarters, the vast

TABLE 3: FREQUENCY OF MISREPORTING OF VA BENEFITS ON BEOG APPLICATION, BY TIME OF FILING AND BY TYPE OF REPORTING ERROR

BEOG Application Time of Filing	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
Jan.-March, 1979	4,908	100.0	4,796	97.72
April-June, 1979	26,908	100.0	26,146	97.17
July-Sept., 1979	49,326	100.0	48,056	97.43
Oct.-Dec., 1979	28,060	100.0	27,600	98.36
Jan.-March, 1980	23,669	100.0	23,290	98.40
April-June, 1980	4,634	100.0	4,563	98.47
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
Jan.-March, 1979	2,134	43.48	2,662	54.24
April-June, 1979	10,846	40.31	15,300	56.86
July-Sept., 1979	19,015	38.55	29,041	58.88
Oct.-Dec., 1979	11,302	40.28	16,298	58.08
Jan.-March, 1980	9,904	41.84	13,386	56.55
April-June, 1980	2,109	45.51	2,454	52.96

majority of BEOG applicants who receive VA benefits have reported benefits inaccurately. Approximately 97 percent of these students are reported on the VA file as receiving an amount different from that reported on the BEOG application.

Comparison of those misreporting by the type of reporting error reveals that, in every quarter, the proportion of applicants reporting that they receive more VA benefits than they actually receive is greater than the proportion underreporting VA benefits. This suggests that VA reporting error may be a source of loss of aid to students to a greater extent than the opposite.

Examination of these data in Table 3 reveals that there appears to be no systematic variation, by application time of year, in either the probability of misreporting VA benefits or the type of error present. Although minor variations, by quarter, are present no detectable pattern is observed.

Issue 4--Of first, second, and third year BEOG applicants, which group is more likely to report VA benefits accurately? Or is there no difference? Since the BEOG program can provide benefits to students during the entire period they are registered in postsecondary school, the possibility exists that applicants will become more accurate in reporting income levels and sources as they become more experienced in filling out BEOG applications and with the VA program. Therefore, an examination of frequency and type of misreporting error by the number of years applicants have filed for BEOG benefits was conducted to determine whether misreporting varies systematically by years of program experience.

Table 4 summarizes the frequency and type of error misreporting of VA benefits by number of years of BEOG filing experience. About 3 percent of total applicants in each BEOG experience category are receiving VA benefits.

Examination of the frequency of misreporting of VA benefits by BEOG experience indicates that the great majority of all applicants (over 97%) report incorrectly the level of VA benefits they are receiving. Review

TABLE 4: FREQUENCY OF MISREPORTING OF VA BENEFITS BY NUMBER OF YEARS BEOG FILING EXPERIENCE AND BY TYPE OF REPORTING ERROR

Years of BEOG Filing Experience	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
First Year BEOG's Applicants	60,532	100.0	59,333	98.02
Second Year BEOG's Applicants	33,655	100.0	32,776	97.39
Third Year BEOG's Applicants	21,829	100.0	21,216	97.19
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
First Year BEOG's Applicants	22,651	37.42	36,682	60.60
Second Year BEOG's Applicants	13,409	39.84	19,367	57.55
Third Year BEOG's Applicants	9,359	42.87	11,857	54.32

of the variation in type of misreporting by BEOG filing year reveals that for all experience years, applicants are more likely to report receiving more VA benefits than they actually do receive.

Results of this aspect of this study indicate that there appears to be no relationship between the number of years of BEOG filing experience and the likelihood that applicants will misreport VA benefits. This finding suggests that learning/experience has no effect on the issue of accuracy of reporting of VA benefits.

Issue 5--Who is more likely to misreport--dependent or independent students? Applicants reporting dependent status are those receiving substantial parental support. They are likely to be younger, unmarried, and have fewer dependents than do independent students. In addition, parents of dependent students may assist in preparing the BEOG application and, having more experience, may be more likely to report accurately.

Independent students may be married and/or have children and the level of VA benefits they receive will vary as the number of dependents varies. Consequently, it is expected that dependent students may be less likely to misreport VA benefits than are independent students.

Table 5 presents the results of this area of investigation. Independent students are much more likely than dependent students to receive VA benefits--7.25 percent versus 1.04 percent of dependent students. However, there appears to be little difference in frequency of misreporting of VA benefits by dependent/independent status. Both groups exhibit a vast majority (over 97%) misreporting VA benefits. This indicates that misreporting cannot be attributed primarily to variations in benefits associated with the complexity of the VA benefit calculation for independent students.

Examination of differences between dependent and independent applicants in type of reporting error does not reveal substantial differences between these groups. Both groups are found to be more likely to overreport VA benefits. However, a slightly larger proportion

TABLE 5: FREQUENCY OF MISREPORTING OF VA BENEFITS BY APPLICANT FILING STATUS AND BY TYPE OF ERROR

Applicant Filing Status	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
Dependent Status	28,297	100.0	27,752	98.07
Independent Status	109,208	100.0	106,699	97.70
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting Benefits	
	No.	Percent	No.	Percent
Dependent Status	11,980	42.34	15,772	55.73
Independent Status	43,330	39.68	63,369	58.02

of independent students overreport benefits than do dependent students. This finding is relevant to the examination of the efficiency of the BEOG program. The greater number (63,369) and frequency (58%) of independent students who overreport benefits suggests that independent students are more likely to receive lower BEOG benefits than would be appropriate if accurate VA benefits reporting was present. Since these students may have greater financial responsibilities and fewer alternative sources of income, the impact of misreporting may be more severe for independent students.

Issue 6--Is there any significant pattern in the correction behavior of applicants who are selected for validation when compared with nonvalidated applicants? About 10 percent of all BEOG applicants are selected for validation which requires that they provide supporting documentation for their BEOG application data. The selection for validation is the result of responses to edit checks of applications or may be on the basis of random selection.

Applicants may make corrections in their BEOG applications whether or not they are selected for validation. However, it is expected that applicants selected for validation will be more likely to make corrections to their BEOG applications. These corrections may be of two types, for either validated or nonvalidated applicants. Solicited corrections may be made by applicants in response to questions resulting from a computer edit check of the application. Unsolicited corrections are independent of specific requests for additional information or clarification of a BEOG application.

It is expected that students selected for validation will be more likely to exhibit correction behavior than are nonvalidated applicants. If these corrections occur, then it is also expected that validated applicants will have a lower proportion misreporting VA benefits than do nonvalidated students.

The correction behavior of validated and nonvalidated applicants receiving VA benefits is compared in Table 6. Slightly fewer of the validated students receive VA benefits than do nonvalidated students.

TABLE 6: CORRECTION BEHAVIOR OF BEOG's APPLICANTS RECEIVING VA BENEFITS BY VALIDATION STATUS

Applicant Filing Status	Total Applicants Receiving VA Benefits		Total Applicants Receiving VA Benefits With No Correction	
	No.	Percent	No.	Percent
Applicants Selected for Validation	7,656	100.0	5,141	67.15
Applicants Not Validated	129,849	100.0	112,123	86.35
	Total Applicants Receiving VA Benefits With Unsolicited Correction		Total Applicants Receiving VA Benefits With Solicited Correction	
	No.	Percent	No.	Percent
Applicants Selected for Validation	1,662	21.71	1,150	15.02
Applicants Not Validated	12,412	9.56	6,144	4.73

Validated applicants are less likely to make "no correction" than are nonvalidated VA benefit applicants. As expected, validation is associated with much higher rates of correction behavior. Over twice as many validated applicants are reported as making corrections to their BEOG applications as do nonvalidated applicants (21.7% versus 9.56%). Over three times as many validated applicants as nonvalidated applicants (15.02% versus 4.73%) are reported as making "solicited" corrections in their BEOG applications. The overall correction rate for validated applicants is about 36 percent compared with less than 15 percent correction by nonvalidated students.

The question of whether the higher correction rate of validated applicants results in higher accuracy rates of reporting of VA benefits by validated students was then examined. Results of this investigation are shown in Table 7. There is virtually no difference between validated and nonvalidated applicants in the frequency of misreporting of VA benefits (97.98% versus 97.77%). However, examination of misreporting by type of error reveals that validated students are more likely to underreport VA benefits than to overreport benefits. Nonvalidated students, on the other hand, are considerably more likely to overreport VA benefits.

One tentative conclusion of this aspect of the analysis, therefore is that selection and validation does not reduce the likelihood of misreporting VA benefits, but instead results in a shift in type of misreporting error. Validated students are less likely to overreport benefits, while all other subgroups examined in this study are more likely to overreport this benefit level. The outcome of validation then may be an increase in the likelihood that students receive the appropriate (or higher) level of BEOG assistance. It apparent, however, that validation does not result in correctly reported VA benefits. As will be seen later, VA awards change frequently in amount and it may be impossible to validate an annual amount at any point in time prior to the end of the year.

TABLE 7: FREQUENCY OF MISREPORTING OF VA BENEFITS BY VALIDATION PRESENCE AND BY TYPE OF ERROR

Validation Status	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
Applicants Selected for Validation	7,656	100.0	7,501	97.98
Applicants Not Validated	129,849	100.0	126,950	97.77
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
Applicants Selected for Validation	3,888	50.79	3,613	47.19
Applicants Not Validated	51,422	39.60	75,528	58.17

Issue 7--Do the VA edits need revisions? The purpose of the computer edits of BEOG applications is to identify missing information and to flag illogical or inconsistent information on applications. Applications identified through the edits are returned to applicants for completion or clarification. The applicant then can resubmit the revised applications if they wish, although some do not. The goal of the edit process is to improve the accuracy of application information and, thus, efficiency of the BEOG program by increasing the number of recipients who are awarded BEOG on the basis of accurate data.

There are nine edit comments related to the issue of reporting of VA benefits. These are:

COMMENT NO	COMMENT
283	--Review the amount in Veteran's Educational Benefits (Box 41). According to records from the Veterans Administration you may be eligible for Veteran's Education Benefits during the 1979-80 academic year. Veteran's Educational Benefits (Box 41) must include amounts that you (not other members of your household) will receive per month from the GI Bill or Survivors' and Dependents' Educational Assistance Program between July 1, 1979 and June 30, 1980. Any questions you may have about your Veteran's benefits can be answered at the nearest VA Regional Office. Is the amount in Box 41 correct? . .Circle One: Yes No If you circled Yes, sign and return the last copy of this report. If you circled No, provide the following: Veteran's benefits per month . . . $_____ Number of months to be received . #___ (V)

284 --Review the amount in Veterans' Educational Benefits (Box 41) because it appears to be incorrect.

Veteran's Educational Benefits (Box 41) must include amounts that you (not other members of your household) will receive per month from the GI Bill or Survivors' and Dependents' Educational Assistance Program between July 1, 1979 and June 30, 1980.

Is the amount in Box 41 correct? . .Circle One: Yes No

If you circled Yes, sign and return the last copy of this report.

If you circled No, provide the following:
Veteran's benefits per month . . . $_____
Number of months to be received . #___ (V)

218 --Review the amount in Box 41 in Section 1 above. Please review your records again to make sure you have reported the correct amount of Veteran's Educational Benefits that you (not other members of your household) will receive per month from the GI Bill or Survivors' and Dependents' Educational Assistance Program between July 1, 1979 and June 30, 1980.

If this amount is correct, you do not need to take any further action on this item.

If this amount is incorrect, make the correction on the last copy of this report, sign and return it.

246 --Review the amount in Box 41 in Section 1 above. Only include the correct amount of Veteran's Educational Benefits that you (not other members of your household) will receive per month from the GI Bill or Survivors' and Dependents' Educational Assistance Program between July 1, 1979 and June 30, 1980. If this amount is correct, you do not need to take any further action on this item. If this amount is incorrect, make the correction on the last copy of this report, sign and return it.

036	--Assumed you will receive Veteran's Benefits for 12 months between July 1, 1979 and June 30, 1980.
037	--Your Veteran's Educational Benefits are assumed to be $999/month. If you will receive a different amount, provide the monthly amount below, sign and return the last copy of this report immediately to: Basic Grants, P.O. Box H, Iowa City, Iowa 52243. Veteran's Benefits per month . . $____
038	--Assumed you will receive Veteran's Benefits for nine months between July 1, 1979 and June 30, 1980.
084	--Provide the following information on applicant's Veteran's Educational Benefits that will be received between July 1, 1979 and June 30, 1980. Veterans' Benefits per month . . $____ Number of months to be received . #__
295	--You must provide documents regarding your 1979-80 Veteran's Educational Benefits. If you will be receiving Veteran's Educational Benefits during 1979-80 you will get an award letter from the Veterans Administration. Take this award letter to you Financial Aid Office when you receive it. If you will not be receiving Veteran's Educational Benefits you may need to prove this at a later date. See your Financial Aid Office for further instructions.

The investigation of the effectiveness of the current edits relating to VA benefits was conducted by examining the frequency of edit comments addressed to applicants receiving VA benefits and to those misreporting, by type of misreporting error. This examination was conducted for initial application information and for the final revised application submitted. Results of the analysis of initial applications are shown in Table 8.

TABLE 8: FREQUENCY OF INITIAL VA BENEFITS MISREPORTING AND EDIT COMMENTS, BY TYPE OF ERROR

Comment	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
283	7,472	100.0	7,472	100.00
284	741	100.0	741	100.00
218	12,575	100.0	12,478	99.23
246	27,229	100.0	26,931	98.91
036	7,778	100.0	7,520	96.68
037	375	100.0	368	98.13
038	1,564	100.0	1,561	99.08
084	5,780	100.0	5,678	98.24
295	1,350	100.0	1,350	100.00
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
283	7,472	100.00	--	--
284	741	100.00	--	--
218	6,467	51.43	6,011	48.80
246	9,535	35.02	17,396	63.89
036	502	6.45	7,018	90.23
037	81	21.06	287	76.53
038	566	36.19	995	63.62
084	647	11.19	5,031	87.04
295	1,302	96.44	48	3.56

On initial applications, the majority of all respondents being edited have misreported VA benefits. Comments 284 and 037 show little relationship to VA benefit misreporting status. Comments 283 and 295 are most frequently applied to applicants underreporting VA benefits; Comments 246, 036, 038, and 084 apply more frequently to overreporting applicants.

One measure of the effectiveness of edits in improving applications accuracy is the improvement in accurate information on the revised applications submitted in response to edit comments. A summary of this issue is presented in Table 9 where changes for misreporting of VA benefits by applicants can be seen by comparing the pre-edit error rates in Table 8 with the post-edit error rate in Table 9. The total number of applicants misreporting VA benefits is less in each comment category after revision of applications to satisfy edit comments. However, the decline in misreporting is small--1 percent or less--for each comment category. It is interesting to note that the most substantial change is for Comment 283 and involves a shift in type of reporting error rather than a substantial decline in misreporting. In the final revised application, there is an increase from 0 percent to 36 percent of applicants receiving Comment 283 who overreport VA benefits (and, consequently, receive lower BEOG benefits than proper). In other words, it appears that the major impact of the edits may be an increase in the number of applicants receiving less than appropriate benefits, rather than an increase in accuracy of awards under the program. This finding appears to be in direct conflict with Applied Management Sciences' study of validation and edits (July 3, 1980, Contract No. 300-79-0742) which concluded that the VA tape match appeared to be effective. However, the previous study defined effectiveness as corrections in response to edits which resulted in reduced awards. While the study confirms that the corrections result in award reduction, they do not result in more accurate data.

Issue 8--What is the relationship between misreporting of VA benefits and the presence of (1) VA benefit change; (2) accounts receivable to VA; or (3) summer school attendance? Examination of these three issues was

TABLE 9: FREQUENCY OF MISREPORTING OF VA BENEFITS AND EDIT COMMENTS ON FINAL APPLICATION SUBMITTED, BY TYPE OF ERROR

Comment	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
283	7,472	100.00	7,422	99.33
284	741	100.00	739	99.73
218	12,575	100.00	12,465	99.13
246	27,229	100.00	26,896	98.78
036	7,778	100.00	7,519	96.67
037	375	100.00	368	98.13
038	1,564	100.00	1,556	99.49
084	5,780	100.00	5,671	98.11
295	1,350	100.00	1,350	100.00
	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
283	4,730	63.30	2,692	36.03
284	456	61.54	283	38.19
218	6,124	48.70	6,341	50.43
246	10,259	37.68	16,637	61.10
036	722	9.28	6,797	87.39
037	99	2.64	269	71.73
038	586	37.47	970	62.02
084	1,213	22.02	4,398	76.09
295	1,148	85.04	202	14.96

conducted to determine whether the presence of one or more of these events was related to misreporting of VA benefits. Table 10 summarizes the findings from this examination.

The monthly payment amount changes for 81 percent of the VA recipients. This is probably the most important finding of the study. How can a student estimate a changing amount correctly? Only 0.59 percent of students reported VA benefits without error when benefits changed during the relevant time interval compared with 9.34 percent of students with no VA benefit change. Of those with a change in VA benefits, overreporting of VA benefits is present among 61.6 percent of applicants and underreporting is present for 37.8 percent. Applicants with no change in VA benefits are, on the other hand, more likely to underreport VA benefits. In sum, changes in VA benefits appear to be associated with higher reporting errors and with greater frequency of overreporting of benefits.

Twenty-two percent of the VA recipients were in repayment status at the time of the study. VA recipients who are repaying excess VA benefits received from the program are also very likely to misreport and are much more likely to overreport VA benefits. In fact, this category of student is almost three times as likely to overreport as to underreport VA benefits. It appears that the VA receipient reported what he received to BEOG without subtracting the amount to be paid back to VA.

Finally, examination of the issue of the relationship between summer school attendance and likelihood of VA misreporting revealed that those students attending summer school are more frequently found to report VA benefits accurately and, when misreporting occurs, this group is found to underreport and overreport VA benefits almost equally often. No intuitively obvious explanation of this findings is apparent.

Results of this aspect of study suggests that VA benefits change and the presence of repayment of excess VA benefits received are important factors contributing to VA recipients' misreporting to BEOG. However, summer school attendance is slightly more likely to be associated with accurate reporting of VA benefits.

TABLE 10: SUMMARY OF VA BENEFITS CHANGE, ACCOUNT RECEIVABLE PRESENT AND SUMMER SCHOOL PRESENT BY TYPE OF REPORTING ERROR

Event	Total Applicants Receiving VA Benefits		Total Applicants Misreporting VA Benefits	
	No.	Percent	No.	Percent
VA Benefits Amount Changed				
-- Change	111,951	100.0	111,296	99.41
-- No Change	25,554	100.0	23,155	90.61
Repaying Excess VA Benefits				
-- AR Present	30,700	100.0	30,581	99.61
-- AR Absent	106,805	100.0	103,870	97.25
Attendance in Summer School				
-- Summer School Present	55,083	100.0	52,339	95.02
-- Summer School Absent	82,422	100.0	82,112	99.62

	Total Applicants Underreporting VA Benefits		Total Applicants Overreporting VA Benefits	
	No.	Percent	No.	Percent
VA Benefits Amount Changed				
-- Change	42,319	37.80	68,977	61.61
-- No Change	12,991	50.84	10,164	39.77
Repaying Excess VA Benefits				
-- AR Present	7,827	25.50	22,754	74.12
-- AR Absent	47,483	44.58	56,387	52.79
Attendance in Summer School				
-- Summer School Present	27,419	49.78	24,920	45.24
-- Summer School Absent	27,891	33.84	54,221	65.78

Conclusions and Recommendations

This report summarizes an investigation of the frequency and severity of the problem of misreporting of VA benefits and its impact on the efficiency of the BEOG program (i.e., its capability for determining appropriate awards based on accurate financial information). The major conclusions emerging from this study are the following:

- The vast majority (over 97%) of VA beneficiaries misreport benefits.
- The total net loss to the BEOG program due to misreporting of VA benefits was less than $2 million in 1979-80. About $5 million dollars in total are misallocated, with the majority of students receiving lower than optimal BEOG payments.
- The discrepancy ranges reported support the finding that overreporting of VA benefits is the most common problem.
- There appears to be no systematic variation in the likelihood of misreporting of VA benefits by: (1) the time of year the BEOG application is filed, (2) the year of BEOG filing experience, or (3) the dependent/independent status of applicants.
- The majority of misreporting applicants actually overreport the level of benefits they receive from the VA program--thus, causing themselves to qualify for lower levels of BEOG benefits.
- Validation impacts on misreporting of VA benefits by shifting the type of error from overreporting to underreporting--increasing the loss to the BEOG program due to overpayments to more students.
- The current edits applicable to the VA benefits issue appear to cause at least a proportion of applicants to shift to overreporting from underreporting VA benefits.
- The monthly benefit amount changes at least once annually for 80 percent of the VA recipients.

The magnitude and extent of errors in reporting VA benefits to BEOG that were detected in this study are extreme. In terms of management action, this conclusion must be balanced against the fact that a minimum of 3 percent of the BEOG applicants receive VA benefits. Further, the net effect of the misreporting is underpayments, not overpayments. Relative to the BEOG Program in its entirety, this is not an extremely severe problem. However, since it has been detected, decisions must be made regarding how to alleviate the problem.

The obvious first option is to exclude VA benefits from the BEOG eligibility determination process since relatively few students would be affected. While this is the simplest solution, it is not ideal because it opens the door for "double dipping" into Federal benefits, a practice which is not politically or socially viable.

The next option requires answering the question of how VA benefits might be collected accurately by the BEOG Program. This study clearly shows that the BEOG Program's two major corrective action strategies--validation and the edits--are virtually ineffective in detecting and correcting errors in the reporting of VA benefits.

Discussions were held with the Veteran's Administration staff to obtain their assessment of the study findings. Based upon these discussions, it appears that the BEOG and VA reporting systems are completely incompatible:

- First, the BEOG application requires an applicant to estimate (as early as January) the monthly amount and number of months he/she will receive VA educational benefits for the upcoming school year. VA reports that the majority of beneficiaries' annual amounts are not the product of number of months times monthly amount. VA pays benefits to correspond to the part of the month the applicant is in school. Given that most schools do not begin nor end on the first or last day of the month, it is virtually impossible in the annual amount to be the product of months times amount per month.
- Second, study findings show and VA confirms, that the monthly benefit amount received by more than 80 percent of the recipients changes at least once annually. This probably occurs because students change such factors as their courseload, marital status or family size. Most VA recipients are veterans who are older than traditional students and probably have responsibilities of jobs and families. VA suggests that plans are often optimistic, and that these optimistic plans serve as the basis for filling out the BEOG application.

Both VA and Applied Management Sciences have thoroughly reviewed the study procedures to be sure that the desired data was provided and was matched correctly with the BEOG data. Factors which typically plague tape match studies (such as differences in definitions of benefit

amounts, time frame covered, and definitions of recipients on the BEOG and VA files) are not operative in this study. The results do not seem to be biased by these types of problems beyond what has already been discussed.

Given the study findings and the incompatibilty of the BEOG (annual) and VA (monthly) systems, the following suggestions are offered to BEOG management.

1. Tape matches may still be continued in conjunction with validation. However, they should be limited to the detection of extreme cases such as those BEOG applicants who appear on the VA file but do not report any VA benefits to BEOG. While the study has shown that edits and validation are ineffective in obtaining correct VA data, allowance of such blatant misreporting is an invitation to further misreporting. As indicated in this report, effective detection and correction would result in savings of more than 700 thousand dollars annually.

2. A policy decision must be made regarding how VA benefits should be collected by BEOG. Based upon the study findings and the monthly variations in VA benefit amounts (to be exacerbated in 1980-81 by Congressionally authorized inflationary increases in October and January), the only way that VA benefits can be obtained accurately is by an end of year reconciliation. Such reconciliations are not currently used by the BEOG Program, and this option is recognized as a major departure from tradition. Any other type of interim procedure which results in the use of estimates will still result in inaccurate data. How much inaccuracy the program will tolerate is a policy issue that is beyond the scope of this study.

APPENDIX A

PROCEDURAL SUMMARY

This study was conducted entirely through computerized statistical procedures. Applied Management Sciences was responsible for preparing the BEOG files. The Student Validation Branch of the Office of Student Financial Assistance made arrangements with the Veteran's Administration (VA) and worked with the VA in developing specifications for their tape.

The VA/BEOG merged sample was created by merging the June BEOG Merged Master File containing application and, where available, recipient data for 4,293,223 applicants (2,454,781 payment transactions) with the data provided by the Veterans Administration (886,800 VA recipients). A sample of 167,731 records were chosen and weighted to represent the entire population.

Records were selected for the VA/BEOG sample as follows:

1) Everyone who received comment 37 or 38 on any transaction.
2) Fifty percent of those who received comment 246, 283, 284, 218, 84 or 36 on any transaction.
3) Fifty percent of those who matched VA and BEOG files by SSAN.
4) One out of every 65 applicants not previously considered who was selected for validation.
5) One out of every 119 other applicants.

About 45 percent of those selected for the VA/BEOG sample matched SSNs on both input files.

The data used for analysis were matched on the basis of social security number and name or date of birth. The dependent variables for the study were discrepancies between the annual amount of benefits contained in VA's file and the BEOG-reported annual VA amount (monthly amount times number of months) and their resultant impact on BEOG eligibility and awards. Since award data were not available for all BEOG applicants, they were simulated by using averages. These simulations assumed that all applicants would become recipients. Therefore, payment impact is somewhat overstated for the matched group. It is understated for the population since no estimate can be made as to the number of students who should have matched but didn't.

The independent variables were the BEOG characteristics of interest discussed in the study issues, plus the following three VA-supplied variables:

- Occurrence of any change(s) in monthly payment amounts.
- Presence/absence of account receivable.
- Presence/absence of summer school.

Strict quality control procedures were adhered to by both Applied Management Sciences and VA. Given the extreme results, both VA and Applied Management Sciences performed independent reviews of all study procedures. No errors were detected.